SHEMS DUNKIEL RAUBVOGEL & SAUNDERS PLLC

REBECCA E. BOUCHER*
ELIZABETH H. CATLIN
BRIAN S. DUNKIEL**
EILEEN I. ELLIOTT
GEOFFREY H. HAND

ANDREW N. RAUBVOGEL MARK A. SAUNDERS RONALD A. SHEMS* KAREN L. TYLER

November 12, 2009

John Dalton c/o Vermont Public Service Board 112 State Street, Drawer 20 Montpelier, VT 05620-2701

Re:

Docket No. 7533

Investigation into Implementation of Standard Offer Prices for Sustainably

Priced Energy Enterprise Development ("SPEED") Resources

Dear Mr. Dalton,

Enclosed please find Renewable Energy Vermont's Response to your First Set of Information Requests.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Brian Dunkiel

SHEMS DUNKIEL RAUBVOGEL & SAUNDERS PLLC

cc: Service List (via email)

STATE OF VERMONT PUBLIC SERVICE BOARD

Investigation into Implementation of Standard)	
Offer Prices for Sustainably Priced Energy)	Docket No. 7533
Enterprise Development ("SPEED") resources)	

RENEWABLE ENERGY VERMONT'S RESPONSE TO THE PUBLIC SERVICE BOARD'S INDEPENDENT WITNESS, JOHN DALTON, FIRST SET OF INFORMATION REQUESTS

Renewable Energy Vermont ("REV"), by and through its undersigned counsel, hereby responds to the First Set of Information Requests served by John Dalton ("Mr. Dalton"), dated November 6, 2009.

Non-Waiver and Reservation of Objections

REV's responses and any objections made hereafter are made without in any way waiving or intending to waive, but on the contrary intending to reserve and reserving:

- A. All questions as to competency, relevancy, materiality, privilege, and admissibility as evidence for any purpose and subsequent proceeding in, or the hearing of, this proceeding, of any of the documents or their subject matter;
- B. The right to object to the use of any of the documents, or their subject matter, in any subsequent proceeding in, or the hearing of, this action, on any grounds;
- C. The right to object on any ground, at any time, to a demand for further production or responses involving or related to the subject matter or the requests for interrogatories;
- D. The right, at any time, to revise, correct, add to, or clarify any of the responses and objections propounded herein;
- E. The right to interpose additional responses and objections and to move for an appropriate protective order; and
- F. The right to object to any inference that can be drawn from any discovery requests or responses to them, that the information requested actually exists or events occurred. The failure by REV to object to any such inference does not constitute an admission that the information exists or events occurred.

INDEX TO OBJECTIONS

REV objects to the discovery requests, to the extent that any request seeks information or documents that fall into one or more of the following categories:

- 1. The request would require REV or its witnesses to respond by divulging privileged material, confidential/proprietary material, and/or material prepared in anticipation of litigation or hearing by REV, including its attorneys. Further, it has not been shown by the party making the request that there is a substantial need for such materials, and that they are unable, without undue hardship, to obtain the equivalent of the requested information by other means.
- 2. The request seeks information that is irrelevant and not reasonably calculated to lead to the discovery of admissible evidence.
- 3. The request, when read with its definitions and general instructions, is vague, broad, general, all inclusive and/or would require REV to speculate as to the information being sought. The request is therefore unduly burdensome and oppressive and does not permit a proper or reasonable response.
- 4. The request would require REV to conduct extensive document review, additional studies, analyses, and/or tests as part of its response.
- 5. The request is unreasonably cumulative or duplicative, and/or the information or documents requested are obtainable from other sources that are less burdensome or less expensive.
- 6. The request calls for a legal conclusion.
- 7. The request exceeds the scope of REV's testimony and exhibits.
- 8. REV objects to the extent that the instructions and definitions given by the requesting party exceed the applicable rules of discovery.

INTERROGATORIES AND REQUESTS TO PRODUCE

1. Please identify the person responding to each of the following discovery requests.

<u>Response</u>: REV has consulted with its expert witnesses in this matter to prepare these responses to requests for information. Unless otherwise noted, all responses for REV are by Lawrence Mott, the REV Board of Directors Chair.

2. What are the different financing approaches (e.g. project finance, conventional real-estate backed mortgage) likely to be employed for the financing of SPEED projects under the standard offer program? Please discuss the relative advantages and disadvantages of these different financing approaches.

Objection: Objection 4. Without limiting or waiving the foregoing objection, REV responds as follows:

Response: Mr. Karcher co-authored a September 2007 Ernest Orlando Lawrence Berkeley National Laboratory report entitled, "Wind Project Financing Structures: A Review & Comparative Analysis" (LBL Report) (a copy is available at http://eetd.lbl.gov/ea/emp/reports/63434.pdf). This report outlines the structures through which most utility-scale wind projects in the United States have been financed. Some of these structures or variations of these structures are still being used in the current utility-scale wind finance markets. The report is not a commentary on the ability of SPEED projects to obtain this type of financing, nor on the likelihood that these structures will be available to the SPEED projects. It is meant only to provide an inventory of project financing structures that have been used for larger renewable energy projects.

The financing approaches employed by SPEED projects will depend on what is available in the market. There is tremendous uncertainty around what may be available given the projects sizes, risk profiles, current market conditions, and number of investors. Prior to the financing crisis the utility-scale project capital markets were driven by large national tax-based equity investors. Anecdotally, it has been difficult for small projects (e.g. 2.2 MW and under) to secure tax equity financing, although published documentation for this is not readily available. It is likely that the investors in the utility-scale projects will not finance projects of this size. If this is indeed the case, these projects will likely have to find funding from local capital providers.

An underlying assumption in the pricing analysis is that federal and state tax incentives that are reasonably available will be utilized. Specifically, the federal ITC is utilized when it is earned and not carried forward. Therefore, it is assumed is that the projects will either have sufficient federal tax liability or a third party tax investor with the necessary tax liability will be brought into the structure.

Financing structures that have been utilized for larger projects employing third party tax-equity investors have been partnership "flip" transactions. In these structures the tax investor contributes a majority of the capital necessary to construct the project, with the developer contributing a smaller amount. Capital contribution amounts vary based on the type of flip structure used. The tax investor receives a preferred return on the project cash and tax benefits until it reaches a pre-negotiated after-tax internal rate of return (IRR). After the IRR target is reached the developer receives most of the project cash and tax income allocations. These structures are extremely complicated and costly to establish, which may limit their use for SPEED projects. However, if employed they do allocate tax benefits to the entity that can most efficiently utilize them (i.e. the tax-based investor).

The single-owner structure has been used to finance projects when the developer or project sponsor has sufficient capital to build the project and the ability to utilize the tax benefits. In this type of structure, the development entity could also be funded not by a single company but rather by a number of smaller investors. However, raising this type of equity must adhere to Securities and Exchanges guidelines, which may increase transaction costs and make the structure more complicated. The single owner structure is fairly simple as there is one investor (or investing entity), without any changes in cash or tax benefit allocations as seen under the partnership flip structures.

Another potential financing structure that has been utilized in utility-scale solar projects is a sale-leaseback. Such a structure does also require third party tax equity. Under this structure the developer (lessee) sells the project to the tax investor (lessor). The tax investor then leases the

project back to the developer. The lessee operates the project, receives all cash revenue and makes regular lease payments, regardless of how well the project performs. So, there is a measure of risk for the lessee in this structure. The lessor receives all of the tax benefits of the projects, so there are no alternating allocations like in a flip structure. This structure provides one hundred percent of the financing. Therefore the developers do not have to contribute up-front capital.

The structures discussed above are not meant to be all-inclusive. They have been employed for financing of utility-scale renewable projects. However, it is unclear if they will translate to projects <2.2MW. Different structures may emerge to the extent local investors enter the sector to finance these projects.

3. Are different financing approaches likely to be employed for different size projects? If so, in REV's opinion for what size projects will the different financing approaches be employed?

<u>Response</u>: Generally, the up-front transaction costs associated with some of the structures previously discussed conceivably provide a barrier to use for smaller projects. These costs generally remain consistent regardless of project size, so a larger project allows for economies of scale. However, as it is unclear what structures will be employed or how liquid the local financing markets are for these projects it is not possible to provide a more definitive answer on specific project sizes.

4. The Prefiled Testimony of Wilson Rickerson and Matthew Karcher (p.8 lines 17-22) outlines an alternative allocation of various tax depreciation classes for a 1.5MW wind project. How would the allocation of project costs vary for different depreciation classes for different technologies? Please provide examples of each technology.

<u>Objections</u>: Objections 4 and 6. Without limiting or waiving the foregoing objections, REV responds as follows:

<u>Response</u>: Experienced tax counsel is required to respond to this request. The estimates provided in the testimony cited are based on Mr. Karcher's experience and are meant to represent a generic utility-scale project.

5. The Prefiled Testimony of Wilson Rickerson and Matthew Karcher (p.17 line 3) references SED, Inc. capacity factor estimates of 17% to 23% for their monitored systems in the Northeast. Please provide the source document that identifies these capacity factor estimates.

Response: These capacity factor numbers are derived from a telephone interview with Kevin Schulte, CEO of Sustainable Energy Developments, conducted by Mr. Rickerson on or about October 28, 2009. These numbers are not published in a document.

6. Prefiled Testimony of Wilson Rickerson and Matthew Karcher (p.24 line 9) references assumptions for different biomass projects. What are the assumptions made regarding residual

value of the projects after the expiration of the standard offer contract in the biomass standard offer price modeling? Please distinguish between the Seasonal Heat-Grid and Full Heat-Grid projects.

<u>Response</u>: Consistent with the 1.5MW wind model used in these proceedings, a residual value of zero was assumed for both the Seasonal Heat-Grid and Full Heat-Grid projects.

7. Prefiled Testimony of Wilson Rickerson and Matthew Karcher (p.24 line 9) references assumptions for different biomass projects. What were the assumptions made regarding the value of the thermal energy produced by the biomass combined heat and power projects in the biomass standard offer modeling? Please distinguish between the Seasonal Heat-Grid and Full Heat-Grid projects.

Response: The analysis did not include any value derived from thermal energy. The differences between Seasonal Heat-Grid and Full Heat-Grid projects are that seasonal, sale-to-grid woody biomass CHP projects ("Seasonal Heat-Grid") are located in plants that primarily serve seasonal space heating loads, while full-time sale-to-grid-CHP projects ("Full Heat-Grid") are located in plants that serve steady-state, twelve-month thermal process loads.

Dated at Burlington, Vermont this 12th day of November, 2009.

As to Objections:

Brian Dunkiel, Esq.

Shems Dunkiel Raubvogel & Saunders, PLLC

91 College Street

Burlington, VT 05401

(802) 860-1003, x 104, bdunkiel@shemsdunkiel.com

Respondent's Signature

By

Lawrence Mott, Chair, Renewable Energy Vermont

Subscribed and sworn before me this Zday of November, 2009.

Docket No. 7533 REV Response to Mr. Dalton's First Set of Information Requests November 12, 2009 Page 6 of 6

Notary Public
My commission expires: 2/10/201/